

ABSTRACT

The C-terminal domain of focal adhesion kinase (FAK-CD) was isolated using a Baculoviral system. Using phage display techniques, a phage encoding a 12 amino-acid peptide (peptide 35) and AV3 that binds to FAK-CD were identified. The peptides were also conjugated to TAT-FITC to produce a fluorescently labeled chimeric molecule capable of penetrating cell membranes. Contacting various breast cancer cell lines with these molecule caused detachment, rounding, apoptosis and cell death. These effects were not observed in normal (non-cancerous) breast cells.